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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,561	07/26/2001	Toshiharu Katsuki	Q65527	5480

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Washington, DC 20037-3213

EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,561

Applicant(s)

KATSUKI ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed October 20, 2003, has been entered. Claims 6, 7, and 9 have been amended as requested. New claims 12-17 have been added. Thus, the pending claims are 1-17, with claims 1-5 and 11 are withdrawn as non-elected.
2. Applicant's amendment and remarks thereto are sufficient to withdraw the claim objections set forth in section 2 and 3 of the last Office Action. Additionally, the rejections based upon Shimano are hereby withdrawn due to applicant's persuasive arguments and to the fact that the coating on the non-printing side of Shimano is a resin layer containing a flame retardant, as does not function as an ink holding agent as presently claimed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 6 and 7 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 6 and 7 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which applicant regards as the invention, as set forth in section 5 of the last Office Action. Specifically, it is still unclear

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how a fabric is composed of synthetic fiber or "fiber containing at least some synthetic fiber."

How can an individual fiber be comprised of 'at least some synthetic fiber' and something else.

Only bicomponent or biconstituent fibers can be comprised of more than one type of fiber, but

inherently both types must be synthetic fibers. Does applicant intend that the *fabric* comprised

be of a blend of fibers, some of which are synthetic fibers?

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification teaches "Substances generally known as ink holding agents which have high wettability to synthetic fiber are synthetic polymers, while compounds useful as ink holding agents lowly wettable to synthetic fiber mainly comprise natural or semi-synthetic polymers, as similarly defined and used in the present invention." (Page 12, section [0189].) Thus, claim 17 which recites that the "ink holding agent of high wettability comprises at least one of a semi-synthetic polymer and a natural polymer" is considered new matter. In other words, the specification teaches the high wettability agent is of a synthetic polymer, not the claimed natural or semi-synthetic polymers.

Claim Rejections - 35 USC § 102

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. Claims 6, 9, and 10 stand rejected under 35 USC 102(b) as being anticipated by US 5,683,784 issued to Nakao et al., as set forth in section 7 of the last Office Action.

Claim Rejections - 35 USC § 103

10. Claim 7 stands rejected under 35 USC 103(a) as being unpatentable over the cited Nakao patent in view of JP 09-279486 issued to Maeda et al., as set forth in section 9 of the last Office Action.
11. Claim 8 stands rejected under 35 USC 103(a) as being unpatentable over the cited Nakao patent in view of EP 1 122 068 issued to Nakamura et al., as set forth in section 10 of the last Office Action.

Response to Arguments

12. Applicant's arguments filed with the amendment of October 20, 2003, have been fully considered but they are not persuasive.
13. Applicant traverses the above rejections by asserting that Nakao does not teach the claimed penetration of the holding agents into the fabric. Additionally, applicant asserts that Nakao's agents of high wettability and low wettability coexist on the same non-printing side of the fabric. In response, it is noted that Nakao's working example 1, teaches a silica coating liquid comprising silica powder and a hydrophilic acrylic resin coated onto one side of the fabric,

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while a boehmite coating liquid comprising a boehmite sol and a polyvinyl alcohol binder is coated onto the other side of the fabric (col. 4, lines 1-22). Nakao teaches the silica is a porous particle that absorbs ink (col. 1, lines 34-57 and col. 1, line 66-col. 2, line 2) and said coating is applied in a high viscosity by a knife coater or dip coater (col. 2, lines 16-25). As such, it is asserted that this silica layer meets applicant's limitation of an ink holding agent of relatively low wettability. Additionally, it is asserted that at least some penetration occurs into the fabric by the mere application of said coating onto the fabric by a knife coater or dip coater. In particular, since fabrics inherently have non-smooth or non-planar surfaces, coatings applied thereto will penetrate to at least some degree with respect to the contours of the fabric surface. Furthermore, the boehmite layer acts to receive ink and fix the colorant or dye (col. 2, lines 26-30) and is coated as a solution having a viscosity of 65 cps (col. 4, lines 12-16), it inherently acts as an ink holding agent of a relatively high wettability, which will inherently penetrate into the fabric at least to some degree. Therefore, applicant's claims are anticipated by Nakao and the above rejection is maintained.

14. Applicant also traverses that the final product of Nakao has a structure of layer/fabric/layer, while the present invention final product merely has the structure of fabric. In response, it is noted applicant is not claiming a final product but merely method steps. As such, applicant's argument is not commensurate in scope with the claimed invention.

New Claim Rejections - 35 USC § 102

15. Claims 12-16 are rejected under 35 USC 102(b) as being unpatentable over the cited Nakao reference.

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Claim 12 limits the ink holding agent of high wettability to being a polymer, claim 13 limits it to being a water-soluble polymer, and claim 16 limits it to being a synthetic polymer. Since Nakao teaches the boehmite layer comprises a binder of polyvinyl alcohol, which is inherently a synthetic, water-soluble polymer, claims 12, 13, and 16 are also anticipated by Nakao.

With respect to claims 14 and 15, it is asserted that the hydrophilic acrylic polymer of the silica ink holding layer of Nakao inherently meets the limitation of the low wettability polymer which can form hydrogen bonds (i.e., hydrophilic) with the ink absorbed therein. Therefore, claims 14 and 15 are also anticipated.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

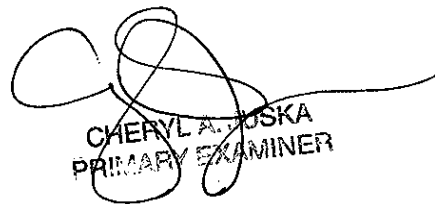
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.



CHERYL A. JUSKA
PRIMARY EXAMINER

cj

January 12, 2004